Docket No.: 1408.017
U.S. Serial No.: 09/882,382
Applicant: LEE *et al.*

AMENDMENT

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (***Currently Amended***) A transdermal preparation having an adhesive layer comprising a drug to be delivered through skin and ~~an~~ a solution-type acrylic adhesive, wherein the drug is hydrophilic or in a salt form and the solution-type acrylic adhesive has a poly (ethylene oxide) or poly (ethylene oxide) monomethyl ether side chain.

2. (***Original***) the transdermal preparation according to claim 1, further comprising at least one additional component chosen from a solubilizer and a skin permeation enhancer.

3. (***Previously Presented***) The transdermal preparation according to claim 1, wherein the amount of drug in the preparation is in a range of 1-50% by weight, based on the total weight of the adhesive layer.

4. (***Currently Amended***) The transdermal preparation according to claim 1, wherein the molecular weight of the poly (ethylene oxide) or poly(ethylene oxide) monomethyl ether is in a range of 100-30000, and wherein the amount of poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether in the acrylic adhesive is in the range of 0.01-50% by weight based on the total weight of the acrylic adhesive.

5. (***Currently Amended***) The transdermal preparation according to claim 4, wherein the molecular weight of the poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether is in a range of 400-5000, and wherein the amount of poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether in the acrylic adhesive is in a range of 0.05-30 % by weight based on the total weight of the acrylic adhesive.

6. (***Previously Presented***) The transdermal preparation according to claim 1, wherein the drug is selected from a group consisting of sodium, potassium and diethylammonium salts of diclofenac, amfenac, aceclofenac and alclofenac; ketorolac tromethamine; hydrochloride, phosphate and methanesulfonate salts of eperisone and tolperisone; oxybutynin chloride; hydrochloride, hydrobromide, fumarate, succinate and tartrate salts of diphenhydramine, ketotifen, doxylamine, promethazine and trimeprazine; hydrochloride and sulfate salts of tulobuterol, clenbuterol, procaterol and terbutaline; acetate, succinate, valerate and disodium phosphate salts of hydrocortisone, dexamethasone and betamethasone; and hydrochloride salts of ondansetron, granisetron and ramosetron.

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7. (***Currently Amended***) The transdermal preparation according to claim 2, wherein the solubilizer comprises at least one component selected from a group consisting of ethanol, isopropanol, poly(ethylene glycol), ethoxydiglycol, ~~distilled water,~~ propylene glycol, glycerin and dimethylsulfoxide, and wherein the amount of solubilizer in the adhesive layer is in a range of 0.5-30% by weight based on the total weight of the adhesive layer.

8. (***Previously Presented***) The transdermal preparation according to claim 2, wherein the skin permeation enhancer comprises at least one component selected from a group consisting of higher fatty acids; higher alcohols; higher fatty acid esters; fatty acid esters; fatty acid ethers of poly(ethylene glycol); fatty acid esters of poly(ethylene glycol); fatty acid ethers of propylene glycol; fatty acid esters of propylene glycol; sorbitan fatty acid esters; poly(ethylene glycol) sorbitan fatty acid esters; terpenes; sulfoxides; pyrrolidones; amides; and *N*-hydroxy methyl lactate, sorbitol, urea, squalene, olive oil, mineral oil and its derivative, and wherein the amount of skin permeation enhancer in the adhesive layer is in a range of 0.5-50% by weight based on the total weight of the adhesive layer.

9. (***Original***) The transdermal preparation according to claim 8, wherein the skin permeation enhancer comprises at least one component selected from a group consisting of lauric

acid, oleic acid, lauryl alcohol, oleyl alcohol, glycerol monolaurate, glycerol monooleate, polyoxyethylene(2) lauryl ether, polyoxyethylene(2) oleyl ether, propylene glycol monolaurate, propylene glycol monooleate, sorbitan monolaurate, sorbitan monooleate, lauryl diethanolamide, *N*-methyl-2-pyrrolidone and isopropyl myristate.

10. (***Previously Presented***) The transdermal preparation according to claim 7, wherein the amount of the solubilizer and of the skin permeation enhancer in the adhesive layer are each in a range of
1-30% by weight, based on the total weight of the adhesive layer.

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11. (***Previously Presented***) The transdermal preparation according to claim 2, wherein the amount of drug is in a range of 1-50% by weight, based on the total weight of the adhesive layer.

12. (***Currently Amended***) The transdermal preparation according to claim 2, wherein the molecular weight of the poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether is in a range of 100-30000, and the amount of poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether is in the range of 0.01-50% by weight based on the total weight of the acrylic adhesive.

13. (***Previously Presented***) The transdermal preparation according to claim 2, wherein the drug is selected from a group consisting of sodium, potassium and diethylammonium salts of diclofenac, amfenac, aceclofenac and alclofenac; ketorolac tromethamine; hydrochloride, phosphate and methanesulfonate salts of eperisone and tolperisone; oxybutynin chloride; hydrochloride, hydrobromide, fumarate, succinate and tartrate salts of diphenhydramine, ketotifen, doxylamine, promethazine and trimeprazine; hydrochloride and sulfate salts of tulobuterol, clenbuterol, procaterol and terbutaline; acetate, succinate, valerate and disodium phosphate salts of hydrocortisone, dexamethasone and betamethasone; and hydrochloride salts of ondansetron, granisetron and ramosetron.

14. (***Previously Presented***) The transdermal preparation according to claim 8, wherein the amount of the solubilizer and of the skin permeation enhancer in the adhesive layer are each in a range of 1-30% by weight, based on the total weight of the adhesive layer.

15. (***Previously Presented***) The transdermal preparation according to claim 9, wherein the amount of the solubilizer and of the skin permeation enhancer in the adhesive layer are each in a range of 1-30% by weight, based on the total weight of the adhesive layer.

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16. (***Original***) An adhesive for use in the transdermal delivery of a hydrophilic or salt form drug, the adhesive comprising an acrylic polymer including a poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether side chain.

17. (***Previously Presented***) A pharmaceutical dosage form for transdermal delivery of a hydrophilic or salt form drug, the dosage form comprising an amount of the drug and an acrylic polymer adhesive, wherein the acrylic polymer has a poly(ethylene oxide) or poly(ethylene oxide) monomethyl ether side chain.